# AI Agent Industry Report

**Introduction:**

The provided texts offer a comprehensive overview of the current state and future implications of Artificial Intelligence (AI). The FII Institute's "AI and The Future 2024" report explores the societal impact of AI, covering topics like inclusivity, ethical considerations, and its potential to solve global challenges in areas such as healthcare. Concurrently, McKinsey's "The state of AI: How organizations are rewiring to capture value" focuses on the corporate adoption of generative AI, detailing how businesses are integrating the technology into workflows, managing associated risks, and addressing the need for new skills and employee retraining to realise tangible value. Both sources underscore the rapid evolution of AI and the urgent need for thoughtful implementation, whether at a global societal level or within an organisational structure, to ensure its beneficial development and application.

**The Global State of AI Adoption and Impact:**

Based on the McKinsey report, here is a comprehensive overview of the current state of the AI industry:

**Current State of the AI Industry**

**Market Adoption Rates** The use of Artificial Intelligence (AI), encompassing both generative AI (gen AI) and analytical AI, continues to gain momentum within organisations

* **Overall AI Use:** More than three-quarters (78%) of surveyed organisations now report using AI in at least one business function, an increase from 72% in early 2024 and 55% a year prior.
* **Multi-functional AI Use:** For the first time, most respondents indicate their organisations use AI in more than one business function, averaging three functions. This marks an increase from early 2024, though it still represents a minority of functions overall
* **Gen AI Adoption**: The use of gen AI, specifically, is rapidly increasing, with 71% of respondents stating their organisations regularly use it in at least one business function, up from 65% in early 2024
* **Key Business Functions for Gen AI:** Organisations are most frequently using gen AI in marketing and sales, product and service development, service operations, and software engineering. These are areas where previous McKinsey research suggests gen AI deployment would likely generate the most value.
* **Industry and Size Variation:** While marketing and sales is a common area for gen AI across all sectors, its deployment in other functions varies significantly by industry (e.g., service operations for media and telecom, software engineering for technology companies, knowledge management for professional services) Larger companies, those with over $500 million in annual revenue, are using gen AI across more of their organisation than smaller companies.
* **Individual Gen AI Use:** Individual use of gen AI has also grown, with C-level executives leading the trend. 53% of surveyed executives regularly use gen AI at work, compared to 44% of mid-level managers
* **Content Generation:** Most respondents (63%) whose organisations use gen AI report creating text outputs. Over one-third (36%) generate images, and more than one-quarter (27%) use it to create computer code. Technology sector respondents report the widest range of gen AI outputs

Key Trends

Organisations are beginning to implement structural and process changes to derive significant value from gen AI

* **Workflow Redesign**: Redesigning workflows has the most significant impact on an organisation's ability to see EBIT (Earnings Before Interest and Taxes) impact from gen AI use. Twenty-one percent of organisations using gen AI have fundamentally redesigned at least some workflows.
* **Senior Leadership Oversight:** A CEO's oversight of AI governance is highly correlated with greater self-reported bottom-line impact from gen AI use, particularly in larger companies17. Twenty-eight percent of organisations using AI report their CEO is responsible for AI governance. Effective AI implementation requires top-down C-suite commitment and an engaged board, as real value necessitates transformation and successful change management, not just new technology.
* **Risk Mitigation:** Organisations are actively working to mitigate a growing number of gen-AI-related risks, with increasing efforts to manage inaccuracy, cybersecurity, and intellectual property infringement risks since early 2024. Larger organisations are mitigating more risks than smaller ones, particularly cybersecurity and privacy risks.
* **Talent and Workforce Adaptation:**

Organisations are hiring for new AI-related roles, including AI compliance specialists (13%) and AI ethics specialists (6%). Larger companies are more likely to hire for a broad range of AI roles, such as AI data scientists, machine learning engineers, and data engineers.

While still challenging, the difficulty in hiring for AI-related roles is easing compared to previous years. However, AI data scientists remain in high demand, with half of AI-using organisations expecting to need more in the next year.

Many organisations have begun reskilling employees due to AI adoption, and they anticipate undertaking more reskilling in the next three years.

Time saved by gen AI deployment is most often reallocated to entirely new activities or increased time on existing responsibilities. Some larger organisations have reduced headcount as a result of time saved, which has a significant impact on bottom-line value.

A plurality of respondents (38%) predict little effect on the overall workforce size in the next three years due to gen AI. While some functions (e.g., service operations, supply chain/inventory management) are expected to see decreased headcount, others (e.g., IT, product development, software engineering) are more likely to see increases.

* **Centralisation of AI Deployment Elements:** Organisations are selectively centralising elements of their AI deployment.
* Risk and compliance and data governance tend to be fully centralised, often through a centre of excellence.
* Tech talent and adoption of AI solutions most commonly use a hybrid or partially centralised model, with some resources central and others distributed.
* **Monitoring Gen AI Outputs:** There is wide variation in how organisations monitor gen AI outputs. While 27% of organisations review all gen AI content before use, a similar share reviews 20% or less. Organisations in business, legal, and other professional services are more likely to review all outputs.
* **Transformative Vision vs. Piecemeal Approach:** Organisations achieving genuine and lasting competitive advantage from AI are those thinking in terms of wholesale transformative change that alters business models, cost structures, and revenue streams, rather than incremental or use-case-by-use-case approaches. An overarching, enterprise-level vision influences data capture and model building, leading to a foundational infrastructure that allows faster and cheaper deployment of further functionality. This transformative thinking also forces CEO and top team alignment, which is critical for orchestrating siloed parts of the enterprise.
* **Adoption and Scaling Best Practices:** While still in early stages, companies are starting to follow practices that correlate positively with EBIT impact. The most impactful practice is tracking well-defined KPIs for gen AI solutions.

However, the reported effects on enterprise-wide bottom-line impact are not yet material for over 80% of respondents.

**McKinsey Report: AI's Financial Impact on Businesses:**

The McKinsey report focuses on the adoption, internal impact, and value capture of AI within organisations rather than providing overall market size figures or specific growth projections for the AI industry as a whole.. However, it does provide insights into the revenue and cost impacts observed within business units, as well as the current state of enterprise-wide EBIT impact.

Here is what the report says regarding revenue impact and related financial outcomes:

**Revenue Increase within Business Units:**

An increasing share of respondents report that their organisations' generative AI (gen AI) use cases have increased revenue within the specific business units where they are deployed.

This trend accelerated from the first half of 2024 to the second half of 2024. For example, in Marketing and Sales, the proportion of respondents reporting a revenue increase of more than 10% from gen AI use rose from 24% in the first half of 2024 to 47% in the second half of 2024.

Similar revenue increases from gen AI are reported when compared to analytical AI activities in previous surveys, suggesting a need for a comprehensive approach across both AI and gen AI to capture full potential value.

Cost Reductions within Business Units.

A majority of respondents now report seeing meaningful cost reductions within the business units using gen AI. This is a significant increase from early 2024, when only a minority observed such reductions.

For instance, in Supply Chain and Inventory Management, the total reported cost decrease from gen AI use rose from 46% of respondents in the first half of 2024 to 61% in the second half of 2024.

In Service Operations, the total cost decrease from gen AI use increased from 45% to 58% over the same period.

Half of respondents whose organisations used gen AI in HR reported that it had reduced costs.

**Enterprise-wide Bottom-Line (EBIT) Impact:**

Despite the reported increases in revenue and reductions in costs at the business unit level, the reported effects of gen AI on enterprise-wide bottom-line impact are not yet material for most organisations.

More than 80% of respondents indicate that their organisations are not yet seeing a tangible impact on enterprise-level EBIT from their use of gen AI.

However, 17% of respondents do state that 5% or more of their organisation's EBIT in the past 12 months is attributable to the use of gen AI.

The report highlights that certain strategic and operational changes are correlated with a higher self-reported bottom-line impact from gen AI:

Redesigning workflows is identified as having the biggest effect on an organisation's ability to see EBIT impact from gen AI. Twenty-one percent of organisations using gen AI have already fundamentally redesigned at least some workflows.

CEO oversight of AI governance is strongly correlated with higher self-reported bottom-line impact, particularly in larger companies. Twenty-eight percent of organisations using AI report their CEO is responsible for overseeing AI governance.

Tracking well-defined Key Performance Indicators (KPIs) for gen AI solutions is noted as the adoption and scaling practice with the most impact on the bottom line.

Generative Artificial Intelligence (AI) and AI more broadly are being applied in a wide array of fields, demonstrating diverse use cases across business, healthcare, education, and even daily life.

Here are some of the key use cases for AI and generative AI as described in the sources:

**Business and Productivity:**

AI is expected to improve productivity by 1.5 percentage points over the next ten years, benefiting all sectors, not just tech companies.It can automate routine work, such as converting bullet points into professional emails.AI is used to sift through vast economic data to discern and decipher patterns, aiding businesses and governments in planning.

Productivity has been shown to increase in areas like customer support, writing business documents, and programming through AI implementation.Organisations are beginning to fundamentally redesign workflows as they deploy generative AI.

Time saved by generative AI deployment is being used by employees to focus on entirely new activities or to spend more time on existing, non-automated responsibilities.

Generative AI is increasingly used in marketing and sales, product and service development, service operations, and software engineering.Organisations are using generative AI to create text outputs, images, and computer code. Some are also experimenting with generating video, voice, and music.

The use of generative AI has led to increased revenue and cost reductions within business units.Search Engines and Information ManagementAI is used in search engines to trawl, sift, and sort web content.Major search engines like Bing, Google, and Baidu have integrated Large Language Models (LLMs) to enhance search results.

Businesses are leveraging AI web crawlers to seed information about their products and services into LLM-powered search results for greater visibility and benefit. For example, Logikcull reportedly gains 5% of its referrals and hundreds of thousands of dollars in revenue from ChatGPT answers.

AI can be used to improve knowledge management within professional services.

**Healthcare and Medical Research**

In India, a digital platform called SMARThealth uses ChatGPT to provide answers to frontline healthcare workers' queries, aiming to reduce pregnancy-related mortalities by providing accessible information in simple and local languages.

Generative AI can address human-resource bottlenecks in healthcare in low-resourced countries by allowing humans to operate at a broader scale.

In radiology, AI can identify tumours or other issues that human radiologists might miss, potentially saving lives.AI is supercharging drug discovery, enabling pharmaceutical companies to develop new formulations and entirely new drugs, and helping find previously unknown causes for diseases.

AI's ability to pattern-match can be used to predict and head off global pandemics by detecting early tremors of outbreaks.The Bill and Melinda Gates Foundation is funding projects like a voice-enabled electronic record management system for healthcare workers in Pakistan and an AI chatbot for gynaecological healthcare support in Vietnam.

**Education and Learning**

Generative AI can help address human-resource bottlenecks in education in low-resourced countries.Foondamate, an AI-powered chatbot in South Africa, helps students with limited internet access to download past exam papers and clarify academic doubts via WhatsApp.

Wikipedia founder Jimmy Wales suggests AI could help editors check for bias in articles, find facts missing from articles that are present in sources, and identify assertions not fully backed by citations.

AI could also improve Wikipedia's search function, providing short, concise answers and a list of relevant articles when a question is typed.

Children note that AI provides more resources for learning and can spark interest in arts. Some acknowledge its use for homework or essay planning, although it's seen as cheating.

**Creative Industries and Design**

AI is seen as a cocreator or a sounding board for new ideas in artistic endeavours.It allows creative directors to make significantly more aesthetic decisions in a day.Individuals can use AI to create portraits and stories, fostering imagination and new creative approaches..

**Social Impact and Governance**

Generative AI can be used for evidence generation for policy implementation, such as plotting violence hotspots during elections to aid government response.In Sri Lanka, an LLM-powered search engine called Ask Watchdog provides impartial, fact-based answers about the economic crisis to the public

Microsoft's AI chatbot, Jugalbandi, helps users access government assistance in local Indian languages.

AI is being used to build a network of volunteers to help women facing violence in Brazil.In the future, AI could potentially enhance productivity and solve complex problems, contributing to societal well-being.

**Environment and Energy**

Generative AI can assist in theoretical bioengineering to create more efficient biofuels like algae.

It can help make inefficient industries, such as steel production, more effective by workshopping blue-sky ideas in an AI context.

Future applications include predicting weather and preventing the worst damage from natural disasters.

**Daily Life and Personal Assistants**

Generative AI tools like ChatGPT can provide recipes based on available ingredients

The vision for AI assistants is that they will become like a "friend, educator, instructor, and recommender" who knows you exceptionally well.

Reference: [Research Link](https://notebooklm.google.com/notebook/5505c7cb-fdb0-48bf-8927-618ef513ede6)